

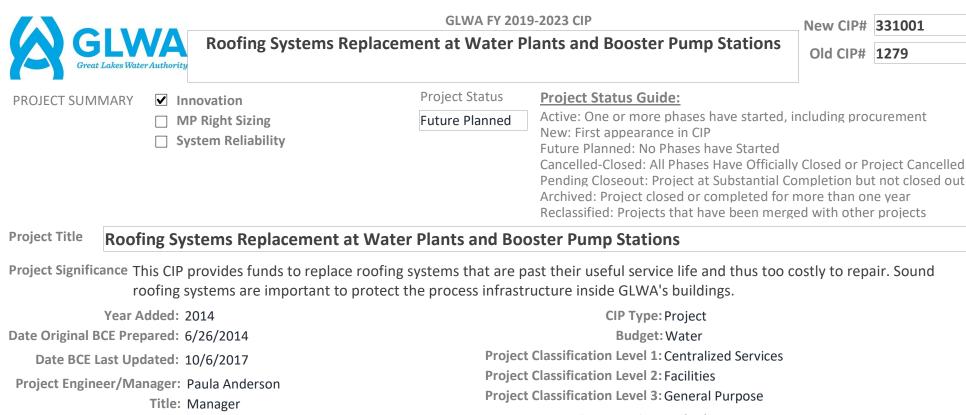
# Appendix C: Centralized Services Business Case Evaluations

Please consider the environment before printing this document.

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CIP 331001: Roofing Systems Replacement at Water Plants and Booster Pump Stations



Phone: (313) 410-7600 Email: paula.anderson@glwater.org Manager: Paula Anderson Managing Dept Water Eng

**Project Location:** Multiple Counties Fund: **Cost Center:** 

**PROJECT INFORMATION** 

- Scope of Work: This project encompasses the evaluation of all Water Treatment Plant and Booster Pump Station roofs to determine their current condition and to prioritize their repair or replacement. The project will evaluate the type of roof, built-up roofing material, flashing, roof drains/conductors and sealing materials that comprise the building envelope. The findings of the roof survey and evaluation will be used to prioritize roof repair and replacement projects for design and construction.
- Project History: Majority of GLWA Water Plant facilities have Built-Up-Roof (BUR) membranes systems commonly referred as "tar and gravel" roofs. Majority of the more than 70 roofs, are over 15 years old and few are even older up to 30 years old. In many instances, inadequate roof system maintenance has been provided.
- Driver: 1 - Condition
- Weather dependent and seasonal work. May require management of several construction projects simultaneously to complete the work. The project Challenges: should include but, not be limited to the following, material testing for hazardous materials, thermal scans and condition analysis.

Other Important Info: \*Innovation note: use cool roofs



Roofing Systems Replacement at Water Plants and Booster Pump Stations

Old CIP# 1279

Related Project: none



GLWA FY 2019-2023 CIP Roofing Systems Replacement at Water Plants and Booster Pump Stations

Phase Category:	S/D/C	Study and Design and Construction	
Budget:	Water		
Contract Number:	NA	PPAT (Phase Program/Allowance Task) Information	
Phase Status:	Future Planned Start	PPAT CIP Number	
Start Date: End Date:		PPAT SOW	
Phase Cost Allocation:	СТА		
Phase Financial Source:	DE		
Lookup Cost Est Class:			
Cost Estimation Date:		Change PPAT PM	
ost Estimation Source:			
ost Estmation Prep By:			
Useful Life > 20Yrs	Yes		
Comments:			



GLWA FY 2019-2023 CIP GLWA FY 2019-2023 CIP Roofing Systems Replacement at Water Plants and Booster Pump Stations

Old CIP# 1279

	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
ALL PHASES IOTAL	0	0	128	169	809	1,243	4,844

Phase Category	S/D/C	Study and Dacian and	Construction		
Budget	Water	Study and Design and	construction		
Phase Status	Future Planned Start	Task Name	Start Date	Duration	End Date
Contract No	NA	Scope Development	10/1/2018	91	12/31/2018
Cost Est Class		Procurement	12/31/2018	272	9/29/2019
		Project Execution	9/29/2019	2793	5/23/2027
		Project Closeout	5/23/2027	90	8/21/2027

**PROJECT PRIORITIZATION SCORING** 



Roofing Systems Replacement at Water Plants and Booster Pump Stations

Old CIP# 1279

Project Manager Score			Review Committee Score		
Criteria	Score	Score Comment	Criteria	Score	Score Comment
Condition	5		Condition	5	
Performance (Service Level/Reli	3		Performance (Service Level/Reliabilit	5	
Regulatory (Environmental/Lega	4		Regulatory (Environmental/Legal)	3	
0&M	5		0&M	5	
Public Health & Safety	3		Public Health & Safety	2	
Public Benefit	2		Public Benefit	1	
Financial	4		Financial	1	
Efficiency and Innovation	2		Efficiency and Innovation	1	
Project Manager W	eighte	d Score	Review Committee We	eighte	d Score
71.4			61		

Describe Here the Changes from the 2018 CIP to 2019 CIP

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018		3,000	3,000	3,000	2,500					11,500
2019			0	0	128	169	809	1,243	4,844	7,193

CIP 331002: Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)

Great La		•	NRRF, CSO Retention Treatment	New CIP#         331002           Old CIP#         1387
PROJECT SUMM	IARY  ✓ Innovation MP Right Sizing ✓ System Reliability	Project Status Future Planned	<b>Project Status Guide:</b> Active: One or more phases have started, New: First appearance in CIP Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Official Pending Closeout: Project at Substantial C Archived: Project closed or completed for	y Closed or Project Cancelled ompletion but not closed out
Project Title	Roofing Systems Replacement at	: GLWA WRRF, CSO Re	Reclassified: Projects that have been mergetention Treatment Basins (RTB) ar	

**Project Significance** Some of the roofs at GLWA WRRF facilities are near its end of useful life. The roofs help to protect the expensive equipment by preventing rain water entering through roofs into the facilities.

Year Added: 2017 **CIP Type:** Project Date Original BCE Prepared: 8/8/2016 **Budget:** Wastewater Project Classification Level 1: Wastewater Date BCE Last Updated: 9/21/2017 **Project Classification Level 2: Programs** Project Engineer/Manager: Ali Khraizat **Project Classification Level 3:** General Purpose Title: Manager **Project Location:** Multiple Counties Phone: (313) 297-8819 Email: ali.khraizat@glwater.org Fund: Manager: Ali Khraizat **Cost Center:** Managing Dept WW Eng

#### PROJECT INFORMATION

Facilities (SDF)

Scope of Work: Inspect the roofing system conditions and assess drainage conditions on all the GLWA wastewater related facility buildings. Document the roofing systems inspections by taking and submitting high-quality photographs, scaled drawings, sketches, and inspection notes to adequately describe the conditions and deficiencies of the roofing systems and their drainage facilities. Recommend the extent of the roofing repairs and replacements required. Document the roof for each building inspected on the project. Classify the roofs into three (3) main categories, such as, 1) Roofs that require complete replacement, 2) Roofs that only require repair, and 3) Roofs that require no action within the next 10 years. Develop a recommended implementation/planning schedule with budgetary costs tied to the schedule for roofing systems evaluated under this contract. Provide any OSHA compliance suggestions that may be applicable for the GLWA's roofing systems evaluated under this contract.

Project History: Majority of GLWA WRRF facilities have Built-Up-Roof (BUR) membranes systems commonly referred as "tar and gravel" roofs. The old Administration buildings and the Newer Administration buildings have tar and gravel type of roof systems. The CSO RTB's and SDF's have metal and shingle type of roof systems. Majority of the roofs are over 15 years old and few are even older up to 30 years. These roof systems has been



Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)

Old CIP# 1387

maintained through regular maintenance and repair or patch work performed to fix the leaking roof spots.

Driver: 1 - Condition

Challenges: Roof material testing for asbestos before demolition and flashing will be challenge to manage as low levels of asbestos are very common in the GLWA's old roof type systems.

Other Important Info: \*Innovation note: Use cool roofs.

Related Project: CON 143:Complex-II Incineration Building Roof Replacement.



New CIP# 331002

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)

Old CIP# 1387

#### Phase Overview

Phase Category:	С		Construction
Budget:	Wastewater		
Contract Number:	NA		PPAT (Phase Program/Allowance Task) Information
Phase Status:	Future Planned Start		PPAT CIP Number
Start Date:		7/3/2020	
End Date:		6/23/2022	PPAT SOW
Phase Cost Allocation:	СТА		
Phase Financial Source:	DE		
Lookup Cost Est Class:			
Cost Estimation Date:		10/2/2017	Change PPAT PM
Cost Estimation Source:			
Cost Estmation Prep By:	Ali Khraizat		
Useful Life > 20Yrs	Yes		
Comments:			
	L		



GLWA FY 2019-2023 CIP

New CIP# 331002

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment **Basins (RTB) and Screening Disinfection Facilities (SDF)** 

Old CIP# 1387

Phase Category:	S/D/CA	Stu	dy and Design and Construction Assistance
Budget:	Wastewater		
Contract Number:	NA		PPAT (Phase Program/Allowance Task) Information
Phase Status:	Future Planned Start		PPAT CIP Number
Start Date:		11/8/2018	PPAT SOW
End Date:		6/23/2022	PPAT SOW
Phase Cost Allocation:	CTA		
Phase Financial Source:	DE		
Lookup Cost Est Class:			
Cost Estimation Date:			Change PPAT PM
Cost Estimation Source:	Contract		
Cost Estmation Prep By:			
Useful Life > 20Yrs	Yes		
Comments:			

### Phase Expenses

CURRENT	PHASE	Construction			В	UDGET	Wastewater	Contract No	NA
Phase Title	Roofing S Treatmer	ystems Replacem nt Plant CSO Reter g Disinfection Faci	ntion Treatment		PPAT C	CIP Number		Phase Status	Future Planned Start
Expens	se Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction					4,830	5,000	)		
Engineering S	Services								
GLWA Salarie	es			450	435				
Materials									
Other									
Current Ph	nase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
	Expenses		0 0	180	174		0 0		0



New CIP# 331002

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)

Old CIP# 1387

							-	
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel Expenses	0	0	22	22	0	0	0	
Current Phase Total	FY18 0	FY19 0	FY20 652	FY21 5,461	FY22 5,000	FY23 0	FY24 and Beyond 0	
CURRENT PHASE Stu	udy and Desigr		1			stewater	Contract No N	A
Treatment Pl	ems Replacemer ant CSO Retenti sinfection Facilit	on Treatment			IP Number		Phase Status Fu	uture Planned Start
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction								
Engineering Services		250	50	100	100			
GLWA Salaries		25	5	10	10			
Materials								
Other								
	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Current Phase Fringe Benefit Expenses	0	10	2	4	4	0	0	
benefit expenses	0	10	2	4	+	0	0	
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel Expenses	0	1	0	0	0	0	0	
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
current Phase rotal	0	286	57	114	114	0	0	
		200	3,					
	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
ALL PHASES TOTAL	0	286	709	5,575	5,114	0	0	

#### Phase Tasks and Dates

Phase Category	С		Construction								
Budget	Wastewater										
Phase Status	Future Planned Sta	art	Task Name	Start Date	Duration	End Date					
Contract No	NA		Scope Development	3/9/2019	360	3/3/2020					
Cost Est Class			Procurement	3/4/2020	180	8/31/2020					



New CIP# 331002

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment **Basins (RTB) and Screening Disinfection Facilities (SDF)** 

Old CIP# 1387

			Task Name	Start Date	Duration	End Date	
			Project Execution	9/1/2020	720	8/22/2022	
			Project Closeout	8/22/2022	60	10/21/2022	
Phase Category Budget	S/D/CA Wastewater		Study and Design and C	onstruction As	sistance		
Phase Status	Future Planne	ed Start	Task Name	Start Date	Duration	End Date	
Contract No	NA		Scope Development	1/1/2018	90	4/1/2018	
Cost Est Class			Procurement	4/1/2018	220	11/7/2018	
	L		Project Execution	11/8/2018	1383	8/22/2022	
			Project Closeout	8/22/2022	60	10/21/2022	

### **PROJECT PRIORITIZATION SCORING**

#### **Project Manager Score**

Project Manager Score				Review Committee Score		
Criteria	Score	Score Comment		Criteria	Score	Score Comment
Condition	4	Asset has <25% of its design s	erv	Condition		4
Performance (Service Level/Reli	4	Significant positive impact on	sys	Performance (Service Level/Reliab	ilit	4
Regulatory (Environmental/Lega	4	Risk of non compliance in nea	t	Regulatory (Environmental/Legal)		2
0&M	2	Low impact on O&M		0&M		1
Public Health & Safety	2	Moderate positive impact		Public Health & Safety		1
Public Benefit	1	Low impact on Public		Public Benefit		1
Financial	2	Project will likely result in avo	da	Financial		3
Efficiency and Innovation	1	low impact on energy use & o	on	Efficiency and Innovation		1
Project Manager W	'eight	ed Score		Review Committee \	Veight	ed Score
54.6				43.8		

### Describe Here the Changes from the 2018 CIP to 2019 CIP

Estimated cost changed.

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total



New CIP# 331002

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2019			0	286	709	5,575	5,114	0	0	11,684

# CIP 351001: Water Facility Lighting Renovations

	GLWA FY 20		New CIP# 351001
Great Lakes Water Authority	Water Facility Lightin	g Renovations	Old CIP# 1366
PROJECT SUMMARY I Innovation	Project Status	Project Status Guide:	
<ul> <li>MP Right Sizing</li> <li>System Reliability</li> </ul>	Active	Active: One or more phases have started New: First appearance in CIP Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officia Pending Closeout: Project at Substantial Archived: Project closed or completed for Reclassified: Projects that have been me	ally Closed or Project Cancelled Completion but not closed out or more than one year
Project Title Water Facility Lighting Renovation	ons		
Project Significance Energy savings, demand reduction	n improved visibility, safet	y, operational efficiency and worker pro	ductivity
Year Added: 2017 Date Original BCE Prepared: 8/4/2016 Date BCE Last Updated: 9/22/2017 Project Engineer/Manager: Shaker Manns Title: Energy Program Manager Phone: (313) 910-6156 Email: shaker.manns@glwater.org Manager: Shaker Manns Managing Dept Systems Planning	Projec	CIP Type: Project Budget: Water et Classification Level 1: Centralized Services et Classification Level 2: Energy Managemen et Classification Level 3: General Purpose Project Location: Multiple Counties Fund: Cost Center:	
PROJECT INFORMATION			
are antiques and compared to today's lig	ut little action was taken. Ad ost. Across the system, equip shting, cannot meet minimu to determine the best suitak	vancement in lighting technology since this a ment is in poor condition and exceeds its er	nd of life. Some existing fixtures mance criteria, lighting control
Driver: 8 - Efficiency			
Challenges: Some outfalls are below the river elevation	; installation may be challen	ging.	
Other Important Info: n/a			
Related Project: Re lamp of Conner Creek and part of N	ortheast for safety issues.		
	Page	518	



## Water Facility Lighting Renovations



Water Facility Lighting Renovations

### Old CIP# 1366

#### Phase Overview

Phase Title Water Facility Lighting Renovations Phase Category: **DB Design and Build** Budget: Water PPAT (Phase Program/Allowance Task) Information Contract Number: NA Phase Status: Active PPAT CIP Number Start Date: 5/24/2016 PPAT SOW End Date: Phase Cost Allocation: CTA Phase Financial Source: I&E Lookup Cost Est Class: Cost Estimation Date: Change PPAT PM Cost Estimation Source: Cost Estmation Prep By: Useful Life > 20Yrs Yes Comments:



## Water Facility Lighting Renovations

Old CIP# 1366

	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
ALL PHASES TOTAL	2	1,172	1,600	0	0	0	0

Phase Category	DB	Design and Build			
Budget	Water	Design and Build			
Phase Status	Active	Task Name	Start Date	Duration	End Date
Contract No	NA	Scope Development	5/21/2017	40	6/30/2017
Cost Est Class		Procurement	8/8/2017	150	1/5/2018
		Project Execution	1/5/2018		
		Project Closeout			

**PROJECT PRIORITIZATION SCORING** 



New CIP# 351001

#### Water Facility Lighting Renovations

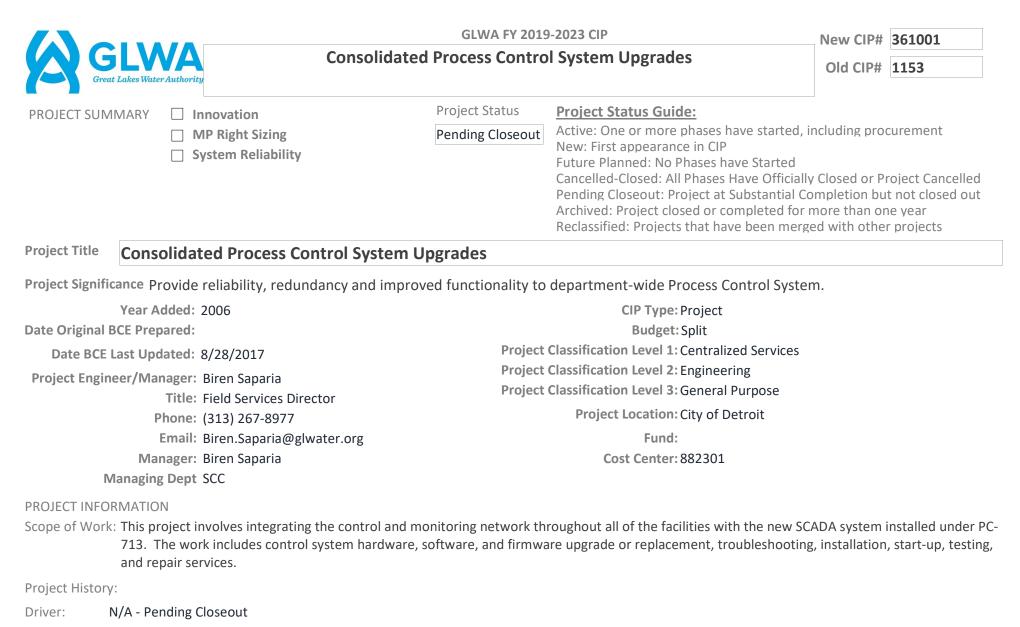
Old CIP# 1366

**Project Manager Score Review Committee Score** Score Score Comment Score Comment Criteria Criteria Score Condition 5 Condition 3 Performance (Service Level/Reli 5 Performance (Service Level/Reliabilit 3 Regulatory (Environmental/Lega 3 Regulatory (Environmental/Legal) 3 0&M 0&M 1 4 Public Health & Safety 4 Public Health & Safety 3 **Public Benefit** 3 Public Benefit 1 Financial 5 Financial 3 Efficiency and Innovation 5 Efficiency and Innovation 4 Project Manager Weighted Score Review Committee Weighted Score 77.4 60.8

Describe Here the Changes from the 2018 CIP to 2019 CIP

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018			933	933	933					2,799
2019			2	1,172	1,600	0	0	0	0	2,774

CIP 361001: Consolidated Process Control System Upgrades



Challenges: N/A - Pending Closeout

Other Important Info:

Related Project:



# Consolidated Process Control System Upgrades

Phase Category: I	DB	Des	sign and Build	
Budget:	Water			
Contract Number:	PC-773C		PPAT (Phase Program/Allowance Task) Information	
Phase Status:	Pending Close-out		PPAT CIP Number	
Start Date:		5/25/2013	PPAT SOW	
End Date:		5/25/2016	PPAT SOW	
Phase Cost Allocation: 0	СТА			
Phase Financial Source: I	DE			
Lookup Cost Est Class:				
Cost Estimation Date:		9/15/2017	Change PPAT PM	
Cost Estimation Source: 0	Contractor			
	Divon Conorio			
Cost Estmation Prep By: I	Biren Saparia			
Cost Estmation Prep By: I Useful Life > 20Yrs	·			
Useful Life > 20Yrs Y Comments:	Yes			
Useful Life > 20Yrs Y Comments:	Yes Consolidated Proces	-	n Upgrades sign and Build	
Useful Life > 20Yrs Comments: Phase Overview hase Title PC-773D Phase Category: I Budget: V	Yes Consolidated Proces DB Wastewater	-	sign and Build	
Useful Life > 20Yrs Comments: Comments: Phase Overview hase Title Phase Category: Budget: Contract Number:	Yes Consolidated Proces DB Wastewater PC-773D	-		
Useful Life > 20Yrs Comments: Comments: Comments: Contract Number: Phase Status:	Yes Consolidated Proces DB Wastewater	-	sign and Build	
Useful Life > 20Yrs Comments: Comments: Phase Overview Phase Title Phase Category: Budget: Contract Number: Phase Status: Start Date:	Yes Consolidated Proces DB Wastewater PC-773D	De: 5/25/2013	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Useful Life > 20Yrs Comments: Comments: Phase Overview Phase Title Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out	Des	sign and Build PPAT (Phase Program/Allowance Task) Information	
Useful Life > 20Yrs Comments: Comments: Comments: Phase Overview Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out	De: 5/25/2013	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Useful Life > 20Yrs Comments: Comments: Comments: Phase Overview Phase Title Phase Category: Budget: Contract Number: Phase Status: End Date: Phase Cost Allocation: Phase Financial Source:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out	De: 5/25/2013	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Useful Life > 20Yrs Comments: Comments: Comments: Chase Overview hase Title Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Chase Financial Source: Lookup Cost Est Class:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out	De: 5/25/2013 5/22/2016	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Useful Life > 20Yrs Comments: Comments: Comments: Comments: Phase Overview Phase Title Phase Category: Budget: Contract Number: Phase Status: Contract Number: Phase Status: Contract Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out CTA DE	De: 5/25/2013	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Useful Life > 20Yrs Comments: Comments: Comments: Chase Overview hase Title Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Chase Financial Source: Lookup Cost Est Class:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out CTA DE Contractor	De: 5/25/2013 5/22/2016	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number PPAT SOW	



New CIP# 361001

# Consolidated Process Control System Upgrades

Phase Exp	enses												
CURRENT	PHASE Des	ign and Buil	d				В	UDGET	Wa	ater		Contract No	PC-773C
Phase Title	PC-773C Cons	olidated Proc	ess Control S	System Up	grades	F	РРАТ С	IP Number	r			Phase Status	Pending Close-out
Expens	se Type	FY18	FY19	FY2	20	FY21		FY22		FY23	FY2	4 and Beyond	
Construction													
Engineering S	Services												
GLWA Salarie	25												
Materials													
Other													
Current Ph	ase Fringe	FY18	FY19	F۱	20	FY2	1	FY22		FY23	FY	24 and Beyond	
	Expenses	0		0	0		0		0		0		0
Current Pl		FY18	FY19	F۱	20	FY2	1	FY22		FY23	FY	24 and Beyond	
Personnel	Expenses	0		0	0		0		0		0		0
Current Ph	ase Total	FY18	FY19	F۱	20	FY2	1	FY22		FY23	FY	24 and Beyond	
		0		0	0		0		0		0		0



Contract No

Cost Est Class

PC-773D

Procurement

Project Execution Project Closeout

New CIP# 361001

# Consolidated Process Control System Upgrades

CURRENT PHAS	SE D	esign and Build	d				BU	JDGET	Wa	astewater		Contract No F	PC-773D
Phase Title PC-7	73D Co	nsolidated Proce	ess Control	Syst	em Upgrades	PP	AT CIP	Number				Phase Status	Pending Close-out
Expense Typ	e	FY18	FY19		FY20	FY21		FY22		FY23	FY2	4 and Beyond	
Construction													
Engineering Service	es												
<b>GLWA</b> Salaries													
Materials													
Other													
		FY18	FY19		FY20	FY21		FY22		FY23	ГУ	24 and Davand	
Current Phase F				0		FIZI	0	FIZZ	0			24 and Beyond	
Benefit Expen	ISES	0		0	0		0		0	C		C	
Current Phase N	lon-	FY18	FY19		FY20	FY21		FY22		FY23	FY	24 and Beyond	
Personnel Expe	nses	0		0	0		0		0	C		C	)
Current Phase T	Total	FY18	FY19		FY20	FY21		FY22		FY23	FY	24 and Beyond	
current i nase i	otar	0		0	0		0		0	C		C	)
		FY18	FY19		FY20	FY21		FY22		FY23	ΕV	24 and Beyond	
ALL PHASES T	OTAL	- 0	1115	0	0	1121	0	1122	0	0	1 1 4		
		0		0	0		0		0	0		0	
Phase Tasks a	and Da	ates											
Phase Category	DB		Desis		ad Duild								
Budget	Wastev	water	Desig		nd Build								
Phase Status	Pendin	g Close-out			ask Name	Start	Date	Durat	ion	End Date	e		
Contract No	PC-773	D	Scop	e De	velopment								



### **Consolidated Process Control System Upgrades**

Old CIP# 1153

Phase Category Budget	DB Water	Design and Build			
Phase Status	Pending Close-out	Task Name	Start Date	Duration	End Date
Contract No	PC-773C	Scope Development			
Cost Est Class		Procurement			
		Project Execution			
		Project Closeout			

### **PROJECT PRIORITIZATION SCORING**

Project Manager Score

Criteria	Score	Score Comment	Criteria	Score	Scor
ondition			Condition		
Performance (Service Level/Reli			Performance (Service Level/Reliabilit		
Regulatory (Environmental/Lega			Regulatory (Environmental/Legal)		
0&M			0&M		
Public Health & Safety			Public Health & Safety		
Public Benefit			Public Benefit		
Financial			Financial		
Efficiency and Innovation			Efficiency and Innovation		
Project Manager We	eight	ed Score	Review Committee We	eighte	d Score

**Review Committee Score** 

### Describe Here the Changes from the 2018 CIP to 2019 CIP

This project is pending close-out. Did not make any changes.

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	3,928	640								4,568
2019	203	118	0	0	0	0	0	0	0	321

CIP 361002: Data Center Reliability/Availability Improvements



New CIP# 361002

Data Center Reliability/Availability Improvements

Old CIP# 1206

PROJECT SUMMARY		vation Right Sizing em Reliability	Project Status Pending Closeout	Project Status Guide: Active: One or more phases have started, including procurement New: First appearance in CIP Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled Pending Closeout: Project at Substantial Completion but not closed out Archived: Project closed or completed for more than one year Reclassified: Projects that have been merged with other projects
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#### Project Title Data Center Reliability/Availability Improvements

Project Significance N/A - Pending Closeout

Year Added: 2009

Date Original BCE Prepared:

Date BCE Last Updated: 10/1/2017

Project Engineer/Manager: Biren Saparia

Title: Field Services Director Phone: (313) 267-8977 Email: Biren.Saparia@glwater.org Manager: Biren Saparia

Managing Dept SCC

PROJECT INFORMATION

Scope of Work: N/A - Pending Closeout

Project History:

Driver:N/A - Pending CloseoutChallenges:N/A - Pending CloseoutOther Important Info:

Related Project:

CIP Type: Project Budget: Split Project Classification Level 1: Centralized Services Project Classification Level 2: Engineering Project Classification Level 3: General Purpose Project Location: City of Detroit Fund: Cost Center:



# Data Center Reliability/Availability Improvements

Phase Overview Phase Title DWS-88	81 Data Center Reliab	ility/Availability Ir	nprovements
Phase Category:			ign and Build
Budget:	Water		
Contract Number:	DWS-881		PPAT (Phase Program/Allowance Task) Information
Phase Status:	Pending Close-out		PPAT CIP Number
Start Date:		1/29/2013	
End Date:		2/27/2016	PPAT SOW
Phase Cost Allocation:	СТА		
Phase Financial Source:	DE		
Lookup Cost Est Class:			
Cost Estimation Date:		9/15/2017	Change PPAT PM
Cost Estimation Source:	Contractor		
Cost Estmation Prep By:	Biren Saparia		
Useful Life > 20Yrs	No		
Comments:			
Phase Overview Phase Title DWS-88	81 Data Center Reliab	ility/Availability Ir	nprovements
Phase Category:	DB	Des	ign and Build
Budget:	Wastewater		
Contract Number:	DWS-881		PPAT (Phase Program/Allowance Task) Information
Phase Status:	Pending Close-out		PPAT CIP Number
Start Date:		1/29/2013	
End Date:		2/27/2016	PPAT SOW
Phase Cost Allocation:	СТА		
Phase Financial Source:	DE		
Lookup Cost Est Class:			
Cost Estimation Date:			Change PPAT PM
Cost Estimation Source:			
Cost Estmation Prep By:			
Useful Life > 20Yrs	No		
Comments:			



New CIP# 361002

# Data Center Reliability/Availability Improvements

Phase Expenses									
CURRENT PHASE	esign and Buil	d			BUDGET	Water		Contract No	DWS-881
Phase Title DWS-881 D	ata Center Relia	bility/Availab	ility Improven	nents PP/	AT CIP Number	ſ		Phase Status	Pending Close-out
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY2	24 and Beyond	
Construction									
Engineering Services									
GLWA Salaries									
Materials									
Other									
Current Phase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	FY	24 and Beyond	
Benefit Expenses	0		0	0	0	0	0		0
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY23	FY	24 and Beyond	
Personnel Expenses	0		0	0	0	0	0		0
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY	24 and Beyond	
	0		0	0	0	0	0		0



New CIP# 361002

# Data Center Reliability/Availability Improvements

CURRENT PHASE De	esign and Build			E	BUDGET	Wastewater	Contract No	DWS-881
Phase Title DWS-881 Da	ta Center Reliab	ility/Availabilit	ty Improvemen	ts PPAT (	CIP Number		Phase Status	Pending Close-out
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction								
Engineering Services								
GLWA Salaries								
Materials								
Other								
	FV/1 0	EV/10	5220	EV/24	EV22	EV22	EV24 and Devend	
Current Phase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Benefit Expenses	0	0	0	0		0 0		0
<b>Current Phase Non-</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel Expenses	0	0	0	0		0 0	(	ס
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
	0	0	0	0		0 0	(	ס
	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
ALL PHASES TOTAL	0	0	0			0 0		
	0	-	0	0		0 0	0	
	0	0	0	U		0 0	0	
Phase Tasks and Dat	tes							
Phase Category DB		Desis	and Devilat					
Budget Wastew	ater	Design a	nd Build					

Wastewater				
Pending Close-out	Task Name	Start Date	Duration	End Date
DWS-881	Scope Development			
	Procurement			
	Project Execution			
	Project Closeout			
	Pending Close-out	Pending Close-outTask NameDWS-881Scope DevelopmentProcurementProject Execution	Pending Close-outTask NameStart DateDWS-881Scope DevelopmentProcurementProject Execution	Pending Close-outTask NameStart DateDurationDWS-881Scope DevelopmentProcurementImage: Comparison of the security of th



### Data Center Reliability/Availability Improvements

Old CIP# 1206

Phase Category Budget	DB Water	Design and Build			
Phase Status		Task Name	Start Date	Duration	End Date
Contract No	DWS-881	Scope Development			
Cost Est Class		Procurement			
		Project Execution			
		Project Closeout			

### **PROJECT PRIORITIZATION SCORING**

Project Manager Score

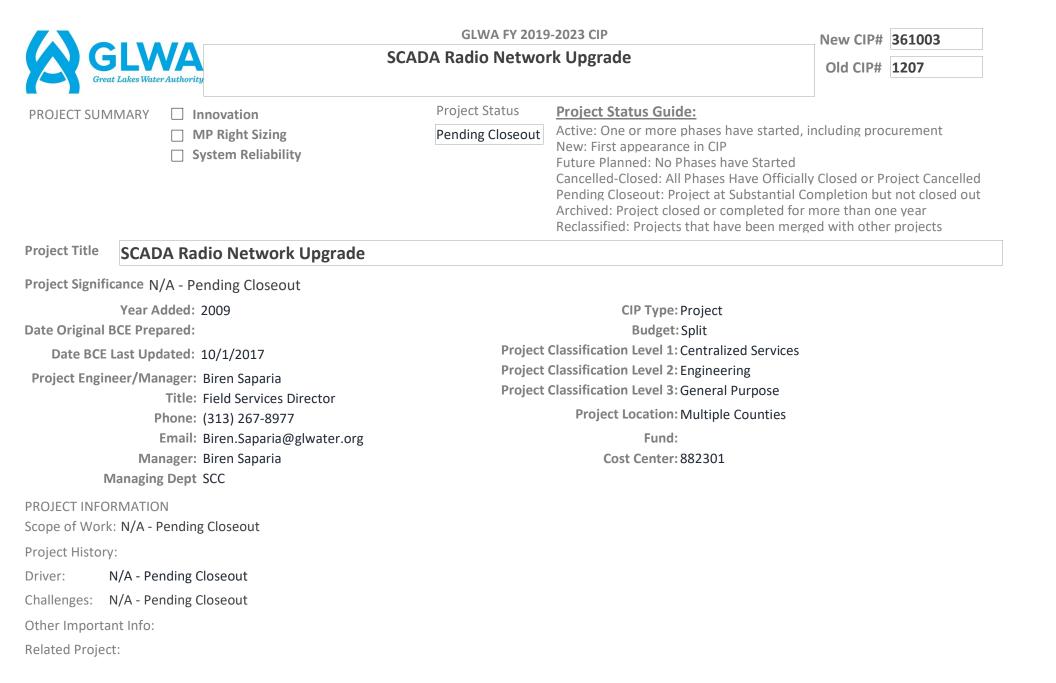
Criteria	Score	Score Comment	Criteria	Score	9
dition			Condition		
rformance (Service Level/Reli			Performance (Service Level/Reliabilit		
gulatory (Environmental/Lega			Regulatory (Environmental/Legal)		
&M			0&M		
ublic Health & Safety			Public Health & Safety		
ublic Benefit			Public Benefit		
nancial			Financial		
ficiency and Innovation			Efficiency and Innovation		
Project Manager W	'eight	ed Score	Review Committee We	eighte	ed Score

**Review Committee Score** 

### Describe Here the Changes from the 2018 CIP to 2019 CIP

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	6,003	10								6,013
2019	33		0	0	0	0	0	0	0	33

CIP 361003: SCADA Radio Network Upgrade





SCADA Radio Network Upgrade

### Phase Overview

Phase Title DWS-8	82 SCADA Radio Netwo	ork Upgrade		
Phase Category:	DB	Des	sign and Build	
Budget:	Water			
Contract Number:	DWS-882		PPAT (Phase Program/Allowance Task) Information	
Phase Status:	Pending Close-out		PPAT CIP Number	
Start Date:		3/26/2013	PPAT SOW	
End Date:		9/30/2016	PPAT SOW	
Phase Cost Allocation:	-			
Phase Financial Source:				
Lookup Cost Est Class:				
Cost Estimation Date:		9/15/2017	Change PPAT PM	
Cost Estimation Source:				
Cost Estmation Prep By:	•			
Useful Life > 20Yrs	Yes			
Comments:				
- 1				
Phase Overview				
	82 SCADA Radio Netwo	ork Upgrade		
			sign and Build	
Phase Title DWS-8 Phase Category:				
Phase Title DWS-8 Phase Category:	DB Wastewater		sign and Build PPAT (Phase Program/Allowance Task) Information	
Phase Title DWS-8 Phase Category: Budget: Contract Number:	DB Wastewater			
Phase Title DWS-8 Phase Category: Budget: Contract Number:	DB Wastewater DWS-882 Pending Close-out		<b>PPAT (Phase Program/Allowance Task) Information</b> PPAT CIP Number	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date:	DB Wastewater DWS-882 Pending Close-out	Des	PPAT (Phase Program/Allowance Task) Information	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation:	DB Wastewater DWS-882 Pending Close-out CTA	Des 3/26/2013	<b>PPAT (Phase Program/Allowance Task) Information</b> PPAT CIP Number	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	<b>PPAT (Phase Program/Allowance Task) Information</b> PPAT CIP Number	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	<b>PPAT (Phase Program/Allowance Task) Information</b> PPAT CIP Number	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number PPAT SOW	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	<b>PPAT (Phase Program/Allowance Task) Information</b> PPAT CIP Number	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date: Cost Estimation Prep By:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number PPAT SOW	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number PPAT SOW	



### SCADA Radio Network Upgrade

Old CIP# 1207

Phase Expenses									
CURRENT PHASE Des	ign and Build				BUDGET	Water		Contract No	DWS-882
Phase Title DWS-882 SCA	DA Radio Netw	ork Upgrade		PPA	T CIP Number	~		Phase Status	Pending Close-out
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	F	Y24 and Beyond	
Construction	60								
Engineering Services									
GLWA Salaries									
Materials									
Other									
Current Phase Fringe	FY18	FY19	FY20	FY21	FY22	FY2	3 F	-Y24 and Beyond	
Benefit Expenses	0	0		0	0	0	0		0
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY2	3 F	Y24 and Beyond	
Personnel Expenses	0	0		0	0	0	0		0
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY2	3 F	Y24 and Beyond	
	60	0		0	0	0	0		0



DWS-882

Contract No

Cost Est Class

New CIP# 361003

### SCADA Radio Network Upgrade

Old CIP# 1207

CURRENT PHA	SE D	esign and Build			BI	JDGET	Wastewater	Contract No	DWS-882
Phase Title DWS	S-882 S(	CADA Radio Netwo	ork Upgrade		PPAT CI	P Number		Phase Status	Pending Close-out
Expense Ty	pe	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction									
Engineering Servic	es								
GLWA Salaries									
Materials									
Other									
Current Dhasa I		FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Current Phase I Benefit Exper	-	0	0	0	0	1122	0 0		0
benent Exper	1565	U	0	0	0		0 0		0
Current Phase		FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel Expe	nses	0	0	0	0		0 0		0
Current Phase	Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
current Filase	Iotai	0	0	0	0		0 0	-	0
		FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
ALL PHASES 1	OTAI	0	0	0	0		0 0		0
		60	0	0	0		0 0		0
								·	
Phase Tasks a	and Da	ates							
Phase Category	DB		Decign a	ad Ruild					
Budget	Wastev	water	Design a						
Phase Status	Pendin	g Close-out	Та	isk Name	Start Date	Durati	ion End Date		

Scope Development

Project Execution Project Closeout

Procurement



#### SCADA Radio Network Upgrade

Old CIP# 1207

Phase Category	DB	Design and Build	Design and Build								
Budget	Water	Design and Duna									
Phase Status	Pending Close-out	Task Name	Start Date	Duration	End Date						
Contract No	DWS-882	Scope Development									
Cost Est Class		Procurement									
		Project Execution	1/1/2017	1	1/2/2017						
		Project Closeout	1/3/2017	90	4/3/2017						

### **PROJECT PRIORITIZATION SCORING**

**Review Committee Score Project Manager Score** Score Comment Criteria Score Score Comment Criteria Score Condition Condition Performance (Service Level/Reli Performance (Service Level/Reliabilit Regulatory (Environmental/Legal) Regulatory (Environmental/Lega 0&M 0&M Public Health & Safety Public Health & Safety Public Benefit Public Benefit Financial Financial Efficiency and Innovation Efficiency and Innovation Review Committee Weighted Score Project Manager Weighted Score

### Describe Here the Changes from the 2018 CIP to 2019 CIP

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	6,221	218								6,439
2019	867	452	60	0	0	0	0	0	0	1,379



Old CIP# 956

Cancelled-Closed: All Phases Have Officially Closed or Project Canc	PROJECT SUMMARY	<ul> <li>Innovation</li> <li>MP Right Sizing</li> <li>System Reliability</li> </ul>	Project Status Active	Cancelled-Closed: All Phases Have Officially Closed or Project Cancel Pending Closeout: Project at Substantial Completion but not closed Archived: Project closed or completed for more than one year
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### Project Title As-needed CIP Implementation Assistance and Related Services

Project Significance The purpose of this proposed contract is to provide implementation assistance and related services on a task order basis to support the GLWA. The services provided under this contract include assistance in capital projects definition and planning, design and construction phase procurement assistance and monitoring; third party contract administration/oversight assistance/scheduling services; claims/changes analysis and resolution; technical training; value engineering (VE) services on selected design projects; develop engineering study reports; identify minimum requirements, scope of work, basis of process design, performance criteria, minimum standards of quality, and preliminary design and oversight services for design/build contracts; proposal analysis assistance; engineering forensic analysis, and additional program support services.

Year Added:	2002	CIP Type: Allowance
Date Original BCE Prepared:		Budget: Split
Date BCE Last Updated:	11/2/2017	Project Classification Level 1: Centralized Services
Project Engineer/Manager:	Gaylor Johnson / Dan Edwards	Project Classification Level 2: Programs
Title:		Project Classification Level 3: Programs
Phone:		Project Location: Multiple Counties
Email:		Fund: 5421
Manager:	Ali Khraizat	Cost Center: 892111
Managing Dept	WW Eng	

#### **PROJECT INFORMATION**

Scope of Work: This project provides for multi-discipline Engineering services on an "as-needed basis" to support GLWA's Water & Sewer Systems. The purpose of this proposed contract is to provide implementation assistance and related services on a task order basis to support the GLWA. The services provided under this contract include assistance in capital projects definition and planning, design and construction phase procurement assistance and monitoring; third party contract administration/oversight assistance/scheduling services; claims/changes analysis and resolution; technical training; value engineering (VE) services on selected design projects; develop engineering study reports; identify minimum requirements, scope of work, basis of process design, performance criteria, minimum standards of quality, and preliminary design and oversight services for design/build contracts; proposal analysis assistance; engineering forensic analysis, and additional program support services.



Old CIP# 956

Project History:

Driver: N/A - Active

Challenges: N/A - Active

Other Important Info:

Related Project: CS-1433, CS-166, CS-189



### Phase Overview

Phase Title CS-166 Capital Improvement Program (CIP) Implementation Assistance and Related Services

Phase Category:		udy and Design and Construction Assistance
0	Wastewater	PPAT (Phase Program/Allowance Task) Information
Contract Number:		
	Under Procurement	PPAT CIP Number 380402
Start Date: End Date:		PPAT SOW The purpose of this proposed contract is to provide implementation
	CT A	assistance and related services on a task order basis to support the
Phase Cost Allocation:		GLWA. The services provided under this contract include assistance
Phase Financial Source:	I&E	in capital projects definition and planning, design and construction
Lookup Cost Est Class:		phase procurement assistance and monitoring; third party contract
Cost Estimation Date:		administration/oversight assistance/scheduling services;
		claims/changes analysis and resolution; technical training; value engineering (VE) services on selected design projects; develop
		engineering (VL) services on selected design projects, develop engineering study reports; identify minimum requirements, scope of work, basis of process design, performance criteria, minimum standards of quality, and preliminary design and oversight services for design/build contracts; proposal analysis assistance; engineering forensic analysis, and additional program support services. Projected Expenses based upon historical percentage of use for CIP projects split 50/50 for water & Wastewater.
Cost Estimation Source:		Change PPAT PM Ali Khraizat
Cost Estimation Prep By:		
Useful Life > 20Yrs	No	
	Services on proposed GLWA Contract task order contract is a contract for s minimum or maximum quantity) and period of the contract. The services provided under this con agencies, customers, and others. Th consultant activities, which are focus consultant secured for this contract	et No. CS 166 will be provided on a task order basis, over a three (3) year period. A services that does not procure or specify a firm quantity of services (other than a d that provides for the issuance of orders for the performance of tasks during the ntract support GLWA in consistently honoring the commitments it makes to regulatory be services provided by the consultant will supplement existing GLWA staff or sed on procuring and administering contracts for individual capital projects. The will act as an Agent for GLWA. For that reason, the consultant is precluded from -contractor on any GLWA projects that the consultant participates in the scope



Old CIP# 956

development for the duration of this contract.
GLWA Contract No. CS-166 will replace CS-1433, As-Needed Capital Improvement Program (CIP) Implementation
Assistance and Related Services, which expired on July 24, 2017. Contract No. CS-189, Job Order Contracting – Project
Delivery Assistance, scheduled to expire July 24, 2018, was executed as a short term solution to assure tasks under CS-
1433 were completed seamlessly, allowing time to competitively bid the request for services. GLWA required these
consulting services contract, to provide specialized expertise in rapid and flexible project delivery methods such as
design/build, program management, and job order contracting.

### **Phase Overview**

Phase Title CS-1433 As-needed CIP Implementation Assistance and Related Services

Phase Category:	S/D/CM	Study and Design and Construction Management
Budget:	Wastewater	
Contract Number:	CS-1433	PPAT (Phase Program/Allowance Task) Information
Phase Status:	Closed Out	PPAT CIP Number 380401
Start Date:	3/24/2006	
End Date:	7/24/2017	PPAT SOW
Phase Cost Allocation:	СТА	
Phase Financial Source:	I&E	
Lookup Cost Est Class:		
Cost Estimation Date:		Change PPAT PM
Cost Estimation Source:		
Cost Estmation Prep By:		
Useful Life > 20Yrs	No	
Comments:		



### Phase Overview

Phase Title CS-166 Capital Improvement Program (CIP) Implementation Assistance and Related Services

Phase Category:		ly and Design and Construction Assistance				
Budget: Contract Number:		PPAT (Phase Program/Allowance Task) Information				
	Under Procurement	PPAT CIP Number 380402				
Phase Status Start Date End Date Phase Cost Allocation Phase Financial Source Lookup Cost Est Class Cost Estimation Date		PPAT SOW The purpose of this proposed contract is to provide implementation assistance and related services on a task order basis to support the GLWA. The services provided under this contract include assistance in capital projects definition and planning, design and construction phase procurement assistance and monitoring; third party contract administration/oversight assistance/scheduling services; claims/changes analysis and resolution; technical training; value engineering (VE) services on selected design projects; develop engineering study reports; identify minimum requirements, scope of work, basis of process design, performance criteria, minimum standards of quality, and preliminary design and oversight services for design/build contracts; proposal analysis assistance; engineering forensic analysis, and additional program support services. Projected Expenses based upon historical percentage of use for CIP projects split 50/50 for water & Wastewater.				
Cost Estimation Source: Cost Estmation Prep By: Useful Life > 20Yrs Comments:	No Services on proposed GLWA Contract No. CS 166 will be provided on a task order basis, over a three (3) year period. A task order contract is a contract for services that does not procure or specify a firm quantity of services (other than a minimum or maximum quantity) and that provides for the issuance of orders for the performance of tasks during the period of the contract.					
	The services provided under this contract support GLWA in consistently honoring the commitments it makes to regulatory agencies, customers, and others. The services provided by the consultant will supplement existing GLWA staff or consultant activities, which are focused on procuring and administering contracts for individual capital projects. The consultant secured for this contract will act as an Agent for GLWA. For that reason, the consultant is precluded from bidding/proposing as a prime or sub-contractor on any GLWA projects that the consultant participates in the scope					



Old CIP# 956

development for the duration of this contract. GLWA Contract No. CS-166 will replace CS-1433, As-Needed Capital Improvement Program (CIP) Implementation Assistance and Related Services, which expired on July 24, 2017. Contract No. CS-189, Job Order Contracting – Project Delivery Assistance, scheduled to expire July 24, 2018, was executed as a short term solution to assure tasks under CS-1433 were completed seamlessly, allowing time to competitively bid the request for services. GLWA required these consulting services contract, to provide specialized expertise in rapid and flexible project delivery methods such as design/build, program management, and job order contracting.

#### **Phase Expenses**

CURRENT PHASE Stu	idy and Design	and Constru	ction Assista	nce	BUDGET	Wastewater	Contract No	CS-166
	al Improvement d Related Servic	• • •	Implementati	on P	PAT CIP Number	380402	Phase Status Under Procurement	
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction								
Engineering Services	250	803	803	8	303			
GLWA Salaries								
Materials								
Other								
Current Phase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Benefit Expenses	0	0	0		0			
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel Expenses	0	0	0		0			
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
	250	803	803		803			



New CIP# 380400

# As-needed CIP Implementation Assistance and Related Services

Old CIP# 956

CURRENT	PHASE	Study and Des	sign and Co	nstru	uction Mar	nagemen	B	BUDGET	Wa	astewater	Contract No	CS-1433
Phase Title	CS-1433 A Related S	As-needed CIP Ir ervices	nplementatio	on As	sistance an	d	PPAT (	CIP Number	3	80401	Phase Status	Closed Out
Expens	е Туре	FY18	FY19		FY20	FY2	1	FY22		FY23	FY24 and Beyond	
Construction												
Engineering S	Services											
GLWA Salarie	S											
Materials												
Other											<u></u>	
Current Ph	ase Fringe	FY18	FY19		FY20	FY	21	FY22		FY23	FY24 and Beyond	l
Benefit l	Expenses		0	0		0	0		0		)	0
Current Ph	nase Non-	FY18	FY19		FY20	FY	21	FY22		FY23	FY24 and Beyond	1
Personnel	Expenses		0	0		0	0		0		כ	0
Current Ph	ase Total	FY18	FY19		FY20	FY	21	FY22		FY23	FY24 and Beyond	I
			0	0		0	0		0		0	0



250

803

New CIP# 380400

# As-needed CIP Implementation Assistance and Related Services

Old CIP# 956

CURRENT F	PHASE	Study and Desigr	and Constru	iction Assista	nce	BUDGET	Water	Contract No	CS-166
		pital Improvement and Related Servi	- · ·	Implementatio	on PPA	AT CIP Numbe	380402	Phase Status	Under Procurement
Expens	е Туре	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction									
Engineering S	ervices	250	803	803	80	3			
GLWA Salaries	s								
Materials									
Other									
Current Ph	ase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Benefit E	Expenses	0	0	0		0			
Current Ph		FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel	Expenses	0	0	0		0			
Current Pha	ase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
		250	803	803	8	03			
		FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
ALL PHASE	ES TOTA	AL 250	803	803	80				0
		230	005	003	00		0	0	

Phase Tasks	and Dates	
Phase Category	S/D/CA	Study and Design and Construction Assistance
Budget	Water	Study and Design and Construction Assistance
Phase Status	Under Procurement	
Contract No	CS-166	
Cost Est Class		

803

803



Phase Category	S/D/CA	Study and Design an	d Construction A	ssistance	
Budget	Wastewater	study and besign an		SSIStance	
Phase Status	Under Procuremen	nt			
Contract No	CS-166				
Cost Est Class					
Phase Category	S/D/CM	Study and Design an	d Construction N	lanagomont	
Budget	Wastewater	Study and Design an		lanagement	
Phase Status	Closed Out	Task Name	Start Date	Duration	End Date
Contract No	CS-1433	Scope Development			
Cost Est Class		Procurement			
		Project Execution			
		Project Closeout			

### **PROJECT PRIORITIZATION SCORING**

Ducient	Managar	Coore
Project	Manager	Score

Project Manager Score			 Review Committee Score		
Criteria	Score	Score Comment	Criteria	Score	Score Comment
Condition			Condition		
Performance (Service Level/Reli			Performance (Service Level/Reliabilit		
Regulatory (Environmental/Lega			Regulatory (Environmental/Legal)		
0&M			0&M		
Public Health & Safety			Public Health & Safety		
Public Benefit			Public Benefit		
Financial			Financial		
Efficiency and Innovation			Efficiency and Innovation		
Project Manager W	eight	ed Score	Review Committee We	eighte	d Score

Describe Here the Changes from the 2018 CIP to 2019 CIP



New CIP# 380400

As-needed CIP Implementation Assistance and Related Services

Old CIP# 956

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	4,770	1,400	100							6,270
2019	210		500	1,606	1,606	1,606	0	0	0	5,528

CIP 380500: Department-wide General Engineering Services on an As-needed Basis



Wastewater General Engineering Services on an As-needed Basis

#### Old CIP# 1026

PROJECT SUMMARY	<ul> <li>Innovation</li> <li>MP Right Sizing</li> <li>System Reliability</li> </ul>	Project Status Active	<ul> <li>Project Status Guide:</li> <li>Active: One or more phases have started, including procurement New: First appearance in CIP</li> <li>Future Planned: No Phases have Started</li> <li>Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled</li> <li>Pending Closeout: Project at Substantial Completion but not closed out Archived: Project closed or completed for more than one year Reclassified: Projects that have been merged with other projects</li> </ul>

#### Project Title Wastewater General Engineering Services on an As-needed Basis

Project Significance Various engineering as needed services for design and replacement of aging water and sewer lines.

Year Added:	2004	CIP Type: Allowance
Date Original BCE Prepared:		Budget: Split
Date BCE Last Updated:	10/27/2017	Project Classification Level 1: Centralized Services
Project Engineer/Manager:	Beena Chackunkal	Project Classification Level 2: Programs
	Engineer	Project Classification Level 3: Programs
	(313) 297-9825	Project Location: Multiple Counties
Email:	Beena.Chackunkal@glwater.or	Fund:
Manager:	Ali Khraizat	Cost Center:
Managing Dept	WW Eng	

**PROJECT INFORMATION** 

Scope of Work: This project involves designing water main and lateral sewer replacement projects for aging and dysfunctional water mains and sewers throughout the system and several projects at the WRRF under different tasks on an as-needed basis. The work also includes civil, structural, architectural, hydraulics, mechanical, electrical, surveying, instrumentation and piping design services.

Project History:

Driver: N/A - Active

Challenges:

Other Important Info:

Related Project:



# Wastewater General Engineering Services on an As-needed Basis

Phase Overview Phase Title CS-1499	) Wastewater General En	igineering Servi	ices on an As-needed Basis (CS-1499 METCO)
Phase Category:	S/D/CA	-	y and Design and Construction Assistance
Contract Number:	Wastewater CS-1499		PPAT (Phase Program/Allowance Task) Information
Phase Status:	Active		PPAT CIP Number 380501
Start Date:		/12/2010	PPAT SOW
End Date:	6	6/2/2018	
Phase Cost Allocation:	СТА		
Phase Financial Source:	I&E		
Lookup Cost Est Class:			
Cost Estimation Date:			Change PPAT PM Ali Khraizat
Cost Estimation Source:	Contract		energe
Cost Estmation Prep By:		-	
Useful Life > 20Yrs	No		
Comments:	Currently most of the ta	asks are for Wa	stewater projects.

Phase Expe	nses									
CURRENT P	HASE	Study and Desig	n and Constru	uction Assistar	nce	BUDGET	Wastev	vater	Contract No	CS-1499
		Vastewater Gener asis (CS-1499 MET		Services on an A	As- PPAT	CIP Number	38050	1	Phase Status	Active
Expense	Туре	FY18	FY19	FY20	FY21	FY22	F	Y23	FY24 and Beyond	
Construction										
Engineering Se	rvices	100	100	80						
GLWA Salaries		10	10	8						
Materials										
Other										
Current Pha	se Fringe	FY18	FY19	FY20	FY21	FY22		Y23	FY24 and Beyond	
Benefit Ex	-	4	4	3		0	0	0		0
Current Pha	ase Non-	FY18	FY19	FY20	FY21	FY22		-Y23	FY24 and Beyond	
Personnel E	xpenses	0	0	0		0	0	0		0



New CIP# 380500

## Wastewater General Engineering Services on an As-needed Basis

Old CIP# 1026

Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	114	114	91	0	0	0	0
ALL PHASES TOTAL	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond

Phase Tasks	and Dates				
Phase Category	S/D/CA	Study and Design and	Construction A	ssistanco	
Budget	Wastewater	Study and Design and	Construction A:	ssistance	
Phase Status	Active	Task Name	Start Date	Duration	End Date
Contract No	CS-1499	Scope Development			
Cost Est Class		Procurement			
		Project Execution			
		Project Closeout	1/9/2020	60	3/9/2020

### **PROJECT PRIORITIZATION SCORING**

**Project Manager Score** 

Criteria	Score	Score Comment						
Condition	1							
Performance (Service Level/Reli	1							
Regulatory (Environmental/Lega	1							
0&M	1							
Public Health & Safety	1							
Public Benefit	1							
Financial	1							
Efficiency and Innovation	1							
Project Manager Weighted Score								
20								

#### **Review Committee Score**

Criteria	Score	Score Comment						
Condition								
Performance (Service Level/Reliabilit								
Regulatory (Environmental/Legal)								
0&M								
Public Health & Safety								
Public Benefit								
Financial								
Efficiency and Innovation								
Review Committee Weighted Score								



Wastewater General Engineering Services on an As-needed Basis

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	10,065	228	228							10,521
2019	282		114	114	91	0	0	0	0	601

CIP 380600: General Engineering Services

		GLWA FY 2019-2023 CIP	New CIP# 380600			
Great Lakes	VA Vater Authority	As-Needed General Engineering Services	Old CIP#	1031		
PROJECT SUMMAR	Y Innovation	Project Status Project Status Guide:				
MP Right Sizing System Reliability		Active Active: One or more phases have started, i New: First appearance in CIP	ncluding pro	curement		
		Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officially Pending Closeout: Project at Substantial Co Archived: Project closed or completed for Reclassified: Projects that have been merg	Completion but not closed o r more than one year			
roject Title As-	Needed General Engine	ering Services				
roject Significance	Allowance for the study and	l design of critical projects throughout the system prior to bidding and con	struction.			
Yea	r Added: 2004	CIP Type: Allowance				
ate Original BCE P	repared:	Budget: Split				
Date BCE Last l	Jpdated: 9/25/2017	Project Classification Level 1: Water				
Project Engineer/N	Aanager: Grant Gartrell	Project Classification Level 2: WRRF				
	Title: Director - Engineering					
	Phone: (313) 926-8139	Project Location: City of Detroit				
	Email: Grant.Gartrell@glwat	-				
	Aanager: Grant Gartrell	Cost Center:				
IVIdIIdg	ing Dept Water Eng					
ROJECT INFORMAT						
	needed engineering services for	water and wastewater engineering.				
roject History:						
	Active					
	Active					
oriver: N/A - hallenges: N/A - Other Important Inf						



### As-Needed General Engineering Services

Old CIP# 1031

### Phase Overview

Phase Title CS-143	32A Water As-Needed Engineering Serv	ices
Phase Category	: D Des	sign
Budget	: Water	
Contract Number	: CS-1432A	PPAT (Phase Program/Allowance Task) Information
Phase Status	: Active	PPAT CIP Number 380601
Start Date	: 1/23/2008	PPAT SOW Alfred Benesh
End Date	: 12/12/2018	PPAT SOW Allied Bellesh
Phase Cost Allocation	: CTA	
Phase Financial Source	: I&E	
Lookup Cost Est Class		
Cost Estimation Date		Change PPAT PM Beena Chackun
Cost Estimation Source		
Cost Estmation Prep By		
Useful Life > 20Yr	s No	
Comments	:	
Phase Overview		
Phase Title CS-143	32A Wastewater As-Needed Engineerin	g Services
Phase Category	: D Des	sign
Budget	: Wastewater	
Contract Number	: CS-1432A	PPAT (Phase Program/Allowance Task) Information
Phase Status	: Active	PPAT CIP Number 380601
Start Date	: 1/23/2008	
End Date	: 12/12/2018	PPAT SOW Alfred Benesh
Phase Cost Allocation	: CTA	
Phase Financial Source	: I&E	
Lookup Cost Est Class		
Cost Estimation Date		Change PPAT PM Beena Chackun
Cost Estimation Source	:	
Cost Estmation Prep By	:	
Useful Life > 20Yr		



New CIP# 380600

## As-Needed General Engineering Services

Old CIP# 1031

Phase Expenses											
CURRENT PHASE Design					B	BUDGET	Wate	er		Contract No	CS-1432A
Phase Title CS-1432A Wa	ter As-Needed	Engineering Se	ervices		PPAT CIP Number 380601			0601		Phase Status	Active
Expense Type	FY18	FY19	FY20	FY2	1	FY22		FY23	FY2	4 and Beyond	
Construction											
Engineering Services	200	240									
GLWA Salaries	25	25									
Materials											
Other											
Current Phase Fringe	FY18	FY19	FY20	FY	21	FY22		FY23	FY	24 and Beyond	
Benefit Expenses	10	10		0	0		0		0		0
Current Phase Non-	FY18	FY19	FY20	FY	21	FY22		FY23	FY	24 and Beyond	
Personnel Expenses	1	1		0	0		0		0		0
Current Phase Total	FY18	FY19	FY20	FY	21	FY22		FY23	FY	24 and Beyond	
	236	276		0	0		0		0		0



New CIP# 380600

### As-Needed General Engineering Services

Old CIP# 1031

CURRENT PHASE	Design				BUDGET	Wastewater		Contract No	CS-1432A	
Phase Title CS-1432A	Wastewater As-Ne	eded Engineer	ring Services		PPAT CIP Number	380601		Phase Status	Active	
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY2	4 and Beyond		
Construction										
Engineering Services	170	51	50							
GLWA Salaries										
Materials										
Other										
Current Phase Fringe	FY18	FY19	FY20	FY2	1 FY22	FY23	FY	24 and Beyond		
Benefit Expenses	0	0	0							
Current Phase Non-	FY18	FY19	FY20	FY2	1 FY22	FY23	FY	24 and Beyond		
Personnel Expenses	0	0	0							
Current Phase Total	FY18	FY19	FY20	FY2	1 FY22	FY23	FY	24 and Beyond		
	170	51	50							
			51/2.0			= 1/2.2				

ALL PHASES TOTAL	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	170	51	50				
	236	276	0	0	0	0	0

Phase Tasks	and Dates		
Phase Category	D	Design	
Budget	Wastewater	Design	
Phase Status	Active		
Contract No	CS-1432A		
Cost Est Class			
Phase Category	D	Design	
Budget	Water	Design	
Phase Status	Active		
Contract No	CS-1432A		
Cost Est Class			



**Review Committee Score** 

New CIP# 380600

### **As-Needed General Engineering Services**

Old CIP# 1031

### **PROJECT PRIORITIZATION SCORING**

**Project Manager Score** 

39.8

Criteria	Score	Score Comment						
Condition	3							
Performance (Service Level/Reli	3							
Regulatory (Environmental/Lega	1							
0&M	2							
Public Health & Safety	3							
Public Benefit	1							
Financial	1							
Efficiency and Innovation 1								
Project Manager Weighted Score								

Criteria	Score	Score Comment						
Condition								
Performance (Service Level/Reliabilit								
Regulatory (Environmental/Legal)								
0&M								
Public Health & Safety								
Public Benefit								
Financial								
Efficiency and Innovation								
Review Committee Weighted Score								

Describe Here the Changes from the 2018 CIP to 2019 CIP

Updated to reflect budget remaining. Added GLWA costs.

CIP Version	n FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	14,011	446	436	386						15,279
2019	316		406	327	50	0	0	0	0	1,099

# CIP 380700: As-Needed Geotechnical and Related Engineering Services



GLWA FY 2019-2023 CIP

New CIP# 380700

As-Needed Geotechnical and Related Engineering Services

Old CIP# 1147

PROJECT SUMMARY	<ul> <li>Innovation</li> <li>MP Right Sizing</li> <li>System Reliability</li> </ul>	Project Status Active	<ul> <li>Project Status Guide:</li> <li>Active: One or more phases have started, including procurement New: First appearance in CIP</li> <li>Future Planned: No Phases have Started</li> <li>Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled</li> <li>Pending Closeout: Project at Substantial Completion but not closed out Archived: Project closed or completed for more than one year</li> <li>Reclassified: Projects that have been merged with other projects</li> </ul>
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### Project Title As-Needed Geotechnical and Related Engineering Services

Project Significance Design of Telegraph Rd, Wick Rd, Park-Merriman, & Schoolcraft water main projects.

Year Added:	2006	CIP Type: Allowance
Date Original BCE Prepared:		Budget: Water
Date BCE Last Updated:	9/25/2017	Project Classification Level 1: Water
Project Engineer/Manager:	Eric Kramp	Project Classification Level 2: Programs
Title:	Engineer	Project Classification Level 3: Programs
Phone:	(313) 999-3875	Project Location: Multiple Counties
Email:	Eric.Kramp@glwater.org	Fund:
Manager:	Grant Gartrell	Cost Center:
Managing Dept	Water Eng	

#### **PROJECT INFORMATION**

Scope of Work: Project utilized as the design mechanism for the Telegraph Road, Wick Road, Park-Merriman, and Schoolcraft water main projects. Also, contract has provisions for the as-needed services associated with pipeline construction projects such as testing, staking, and inspection.

Project History:

Driver: N/A - Active

Challenges: N/A - Active

Other Important Info:

Related Project:



## As-Needed Geotechnical and Related Engineering Services

Old CIP# 1147

### Phase Overview

Phase Title CS-1488 Engineering Services, Concrete Testing and Soil Borings

Phase Category:	С	Co	nstruction
Budget:	Water		
Contract Number:	CS-1488		PPAT (Phase Program/Allowance Task) Information
Phase Status:	Active		PPAT CIP Number 380701
Start Date:		4/8/2009	DDAT SOMA Engineering Services Congrete Testing and Seil Derings (CS 1499)
End Date:		4/8/2021	PPAT SOW Engineering Services, Concrete Testing and Soil Borings (CS-1488)
Phase Cost Allocation:	CTA		
Phase Financial Source:	1&E		
Lookup Cost Est Class:			
Cost Estimation Date:			Change PPAT PM Grant Gartrell
Cost Estimation Source:			
Cost Estmation Prep By:			
Useful Life > 20Yrs	No		
Comments:			

# As-Needed Geotechnical and Related Engineering Services

Old CIP# 1147

	FY18	FY19         FY20         FY21         FY22         FY23         FY24 and Beyond           477         477         477         238         0         0					
ALL PHASES IOTAL	238	A / /			238	0	0

Phase Category	С											
Budget	Water	Construction	Instruction									
Phase Status	Active	Task Name	Start Date	Duration	End Date							
Contract No	CS-1488	Scope Development										
Cost Est Class		Procurement										
		Project Execution	6/1/2016	1429	4/30/2020							
		Project Closeout	5/1/2020	90	7/30/2020							

**PROJECT PRIORITIZATION SCORING** 



## As-Needed Geotechnical and Related Engineering Services

Old CIP# 1147

Project Manager Score			 Review Committee Score		
Criteria	Score	Score Comment	Criteria	Score	Score Comment
Condition			Condition		
Performance (Service Level/Reli			Performance (Service Level/Reliabilit		
Regulatory (Environmental/Lega			Regulatory (Environmental/Legal)		
0&M			0&M		
Public Health & Safety			Public Health & Safety		
Public Benefit			Public Benefit		
Financial			Financial		
Efficiency and Innovation			Efficiency and Innovation		
Project Manager W	eight	ed Score	Review Committee We	eighte	d Score

Describe Here the Changes from the 2018 CIP to 2019 CIP

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018		650	907	333	333	333				2,557
2019	230		238	477	477	477	238	0	0	2,137

CIP 380800: Geotechnical and Related Services on an As-Needed Basis



Geotechnical and Related Services on an As-Needed Basis

Old CIP# 1164

PROJECT SUMMARY	<ul> <li>Innovation</li> <li>MP Right Sizing</li> <li>System Reliability</li> </ul>	Project Status Pending Closeout	Project Status Guide: Active: One or more phases have started, including procurement New: First appearance in CIP Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled Pending Closeout: Project at Substantial Completion but not closed out Archived: Project closed or completed for more than one year Reclassified: Projects that have been merged with other projects
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### Project Title Geotechnical and Related Services on an As-Needed Basis

Project Significance As Needed geotechnical consulting services.

Year Added: 2007	CIP Type: Allowance
Date Original BCE Prepared:	Budget: Split
Date BCE Last Updated: 10/27/2017	Project Classification Level 1: Centralized Services
Project Engineer/Manager: Grant Gartrell Title: Director - Engineering	Project Classification Level 2: Programs Project Classification Level 3: Programs
Phone: (313) 926-8139	Project Location: Multiple Counties
Email: Grant.Gartrell@glwater.org	Fund:
Manager: Grant Gartrell	Cost Center:
Managing Dept N/A - Pending Closeo	

#### PROJECT INFORMATION

Scope of Work: The work includes consultant services for geotechnical work on as-needed basis. The work also provides for additional engineering/ technical services as requested.

#### Project History:

Driver: N/A - Pending Closeout

Challenges: N/A - Pending Closeout

Other Important Info:

Related Project:



**Geotechnical and Related Services on an As-Needed Basis** 

#### Phase Overview

Phase Title CS-1490: NTH Consultants: As-Needed Geotechnical Services

Phase Category:	D	Des	ign	
Budget:		2.00	. <del>.</del>	
Contract Number:			PPAT (Phase Program/Allowance Task) Information	
Phase Status:	Pending Close-out		PPAT CIP Number 380801	
Start Date:	1/1-	4/2010	DDAT COM/ As Needed Costs by ited Comises	
End Date:	7/1-	4/2016	PPAT SOW As-Needed Geotechnical Services	
Phase Cost Allocation:	СТА			
Phase Financial Source:	I&E			
Lookup Cost Est Class:				
Cost Estimation Date:			Change PPAT PM Grant Gartrell	
Cost Estimation Source:				
Cost Estmation Prep By:				
Useful Life > 20Yrs	No			
Comments:				
Phase Overview Phase Title CS-1490 Phase Category:	: NTH Consultants: As-Nee D	eded Geotec <b>Des</b>		
		L		
-	Wastewater			
Contract Number:	Wastewater CS-1490		PPAT (Phase Program/Allowance Task) Information	
Contract Number: Phase Status:	Wastewater CS-1490 Pending Close-out		PPAT (Phase Program/Allowance Task) Information PPAT CIP Number 380801	
Contract Number: Phase Status: Start Date:	Wastewater CS-1490 Pending Close-out 1/1	4/2010	PPAT CIP Number 380801	
Contract Number: Phase Status: Start Date: End Date:	Wastewater CS-1490 Pending Close-out 1/1 7/1			
Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation:	Wastewater CS-1490 Pending Close-out 1/1 7/1 CTA	4/2010	PPAT CIP Number 380801	
Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source:	Wastewater CS-1490 Pending Close-out 1/1 7/1 CTA	4/2010	PPAT CIP Number 380801	
Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class:	Wastewater CS-1490 Pending Close-out 1/1 7/1 CTA	4/2010	PPAT CIP Number 380801 PPAT SOW As-Needed Geotechnical Services	
Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	Wastewater CS-1490 Pending Close-out 1/1 7/1 CTA	4/2010	PPAT CIP Number 380801	
Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date: Cost Estimation Source:	Wastewater CS-1490 Pending Close-out 1/1 7/1 CTA	4/2010	PPAT CIP Number 380801 PPAT SOW As-Needed Geotechnical Services	
Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date: Cost Estimation Source: Cost Estimation Prep By:	Wastewater CS-1490 Pending Close-out 1/1 7/1 CTA I&E	4/2010	PPAT CIP Number 380801 PPAT SOW As-Needed Geotechnical Services	
Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date: Cost Estimation Source:	Wastewater CS-1490 Pending Close-out 1/1 7/1 CTA I&E	4/2010	PPAT CIP Number 380801 PPAT SOW As-Needed Geotechnical Services	



New CIP# 380800

### Geotechnical and Related Services on an As-Needed Basis

Old CIP# 1164

Phase Expenses												
CURRENT PHASE Des	sign				E	BUDGET	Wa	ater		Contract No	CS-1490	
Phase Title CS-1490: NTH	Consultants:	As-Needed Ge	otechnical Ser	vices	PPAT	PPAT CIP Number 380801			Phase Status	Pending Close-c	ut	
Expense Type	FY18	FY19	FY20	FY	21	FY22		FY23	F	Y24 and Beyond		
Construction												
Engineering Services												
GLWA Salaries												
Materials												
Other												
Current Phase Fringe	FY18	FY19	FY20	F	(21	FY22		FY23		- Y24 and Beyond		
Benefit Expenses	0	(	) (	)	0		0		0	•	0	
Current Phase Non-	FY18	FY19	FY20	F	/21	FY22		FY23		Y24 and Beyond		
Personnel Expenses	0	(	) (	)	0		0		0		0	
Current Phase Total	FY18	FY19	FY20	F	(21	FY22		FY23		- Y24 and Beyond		
	0	(	) (	)	0		0		0		0	
CURRENT PHASE Des	sign				E	BUDGET	Wa	astewater		Contract No	CS-1490	
	-	As-Needed Ge	otechnical Ser	vices		CIP Number	З	80801		Phase Status	Pending Close-c	ut
C5 1450. 1411				VICCS			J	00001			i chung close c	ut
Current Phase Fringe Benefit Expenses												
Current Phase Non- Personnel Expenses												
Current Phase Total												
ALL PHASES TOTAL	FY18 0	FY19 0	FY20		21 0	FY22	0	FY23	F 0	Y24 and Beyond	0	



Geotechnical and Related Services on an As-Needed Basis

### Old CIP# 1164

Phase Tasks	and Dates								
Phase Category	D	Design							
Budget	Wastewater	Design							
Phase Status	Pending Close-out								
Contract No	CS-1490								
Cost Est Class									
Phase Category	D	Design							
Budget	Water								
Phase Status	Pending Close-out	Task Name	Start Date	Duration	End Date				
Contract No	CS-1490	Scope Development							
Contract No Cost Est Class	CS-1490								
	CS-1490	Scope Development							
	CS-1490	Scope Development Procurement							

### **PROJECT PRIORITIZATION SCORING**

#### Project Manager Score

Criteria	Score	Score Comment		Criteria	Score	Score Comment		
Condition				Condition				
Performance (Service Level/Reli				Performance (Service Level/Reliabilit				
Regulatory (Environmental/Lega				Regulatory (Environmental/Legal)				
0&M				0&M				
Public Health & Safety				Public Health & Safety				
Public Benefit				Public Benefit				
Financial				Financial				
Efficiency and Innovation				Efficiency and Innovation				
Project Manager Weighted Score				Review Committee Weighted Score				

**Review Committee Score** 

Describe Here the Changes from the 2018 CIP to 2019 CIP



## Geotechnical and Related Services on an As-Needed Basis

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	2,441	132								2,573
2019	164		0	0	0	0	0	0	0	164

CIP 380900: General Engineering Services

		GLWA FY 20	New CIP#	380900			
GI GI Great Lakes Wo	ter Authority	General Engineeri	Old CIP#	1182			
PROJECT SUMMARY Innovation		Project Status	Project Status Guide:				
	MP Right Sizing	Active	Active: One or more phases have started, New: First appearance in CIP	including pro	curement		
	System Reliability		Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officiall Pending Closeout: Project at Substantial C Archived: Project closed or completed for Reclassified: Projects that have been merg	ompletion bu more than or	t not closed ou ne year		
roject Title Gen	eral Engineering Services						
roject Significance	As needed multi-discipline engineerin	ng services for various	small scale projects at WTP and WRRF.				
Year	Added: 2007		CIP Type: Allowance				
ate Original BCE Pre	epared:	Budget: Wastewater					
Date BCE Last Up	odated: 9/21/2017	-	ct Classification Level 1: Centralized Services				
Project Engineer/M	anager: Beena Chackunkal	Project Classification Level 2: Programs					
	Title: Engineer	Projec	ct Classification Level 3: Programs				
	Phone: (313) 297-9825		Project Location: Multiple Counties				
М	Email: Beena.Chackunkal@glwater.or anager: Ali Khraizat	Fund: Cost Center:					
	ng Dept WW Eng		cost center.				
ROJECT INFORMATI	ON						
cope of Work: This p		ound for a variety of proj	ects on an as-needed basis providing multi-di	sciplinary pro	fessional servic		
roject History:							
river: N/A - A	ctive						

Other Important Info:

Related Project:



## **General Engineering Services**

Old CIP# 1182

### Phase Overview

Phase Title CS-148	1 Sigma General Engineering Serv	vices
Phase Category:	S/D/CA	Study and Design and Construction Assistance
Budget:	Wastewater	
Contract Number:	CS-1481	PPAT (Phase Program/Allowance Task) Information
Phase Status:	Active	PPAT CIP Number 380901
Start Date:	3/27/200	
End Date:	3/27/201	8 PPAT SOW
Phase Cost Allocation:	СТА	
Phase Financial Source:	I&E	
Lookup Cost Est Class:		
Cost Estimation Date:		Change PPAT PM Beena Chackun
Cost Estimation Source:	Contract	
Cost Estmation Prep By:		
Useful Life > 20Yrs	No	
Comments:	Currently most of the projects a	are for Wastewater Services.

URRENT	PHASE	Study and Desig	n and Constru	ction Assista	nce	BUDGET	Wastewater		Contract No	CS-1481
ase Title	CS-1481 S	Sigma General Engi	neering Service	S	PPAT	CIP Number	380901		Phase Status	Active
Expen	se Type	FY18	FY19	FY20	FY21	FY22	FY23	FY	24 and Beyond	
onstruction										
gineering	Services	500	800	371						
WA Salarie	es	50	80	37						
aterials										
ner										
urront D	hase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	F	Y24 and Beyond	
	Expenses	20		15	(		0	0		0
Current P	hase Non-	FY18	FY19	FY20	FY21	FY22	FY23	F	Y24 and Beyond	
Personnel	Expenses	2	4	2	(		0	0		0



New CIP# 380900

Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	572	916	425	0	0	0	0
					1		
ΔΙΙ PHASES ΤΟΤΑΙ	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond

**General Engineering Services** 

Phase Tasks	and Dates				
Phase Category	S/D/CA	Study and Design and	Construction As	sistanco	
Budget	Wastewater	Study and Design and	Construction As	sistance	
Phase Status	Active	Task Name	Start Date	Duration	End Date
Contract No	CS-1481	Project Closeout	3/28/2021	60	5/27/2021
Cost Est Class					

### **PROJECT PRIORITIZATION SCORING**

**Review Committee Score** 

Criteria	Score	Score Comment	Criteria	Score	Score Comment
Condition	5		Condition		
Performance (Service Level/Reli	5		Performance (Service Level/Reliabilit		
Regulatory (Environmental/Lega	5		Regulatory (Environmental/Legal)		
0&M	5		0&M		
Public Health & Safety	5		Public Health & Safety		
Public Benefit	5		Public Benefit		
Financial	5		Financial		
Efficiency and Innovation	5		Efficiency and Innovation		
Project Manager W	eight	ed Score	Review Committee We	eighte	d Score
100					

Describe Here the Changes from the 2018 CIP to 2019 CIP



New CIP# 380900

Old CIP# 1182

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	28	1,250	1,154							2,432
2019	138		572	916	425	0	0	0	0	2,051

# CIP 381000: Energy Management: Electric Metering Improvement Program



Old CIP# 1343

PROJECT SUMMARY	Innovation	Project Status	Project Status Guide:
	<ul> <li>MP Right Sizing</li> <li>System Reliability</li> </ul>	Active	Active: One or more phases have started, including procurement New: First appearance in CIP Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled Pending Closeout: Project at Substantial Completion but not closed out Archived: Project closed or completed for more than one year Reclassified: Projects that have been merged with other projects
Project Title <b>Eng</b>	ray Managamant, Electric M		Drogram

#### Project Title Energy Management: Electric Metering Improvement Program

Project Significance Advanced meters for measuring power usage in real-time to reduce the electrical demands and further optimize load management practices

Year Added: 2016	CIP Type: Program
Date Original BCE Prepared: 8/18/2016	Budget: Split
Date BCE Last Updated: 10/6/2017	Project Classification Level 1: Centralized Services
Project Engineer/Manager: Shaker Manns	Project Classification Level 2: Programs
Title: Energy Program Manager	Project Classification Level 3: Programs
Phone: (313) 910-6156	Project Location: Multiple Counties
Email: shaker.manns@glwater.org	Fund:
Manager: Shaker Manns	Cost Center:
Managing Dept Energy Management	

**PROJECT INFORMATION** 

Scope of Work: This program will increase the number of electric meters at pumping stations and treatment facilities to allow for active demand management to reduce electricity rates. The meters can be tied to the existing data management system for data archiving and use.

Project History: Project is in the works targeting high demand (kW) sites - all the water treatment plants (Phase 1)

Driver:

Challenges:

Other Important Info:

Related Project: Completed Adams Road booster station install as a pilot piece



Phase	Overview
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Phase Title Energy Management: Electric Metering Improvement Program

Lileigy	ivianagement. Lieutric ivietering impr	
Phase Category:	S/D/C Stu	udy and Design and Construction
	Water	
Contract Number:	NA	PPAT (Phase Program/Allowance Task) Information
Phase Status:	Future Planned Start	PPAT CIP Number
Start Date:		PPAT SOW
End Date:		
Phase Cost Allocation:	-	
Phase Financial Source:		
Lookup Cost Est Class:		
Cost Estimation Date:		Change PPAT PM
Cost Estimation Source:		
Cost Estmation Prep By:		
Useful Life > 20Yrs	No	
Comments:		
Phase Overview		
Phase Title Energy	Management: Electric Metering Impr	rovement Program
Phase Category:	S/D/C Stu	udy and Design and Construction
Budget:	Wastewater	
Contract Number:	NA	PPAT (Phase Program/Allowance Task) Information
Phase Status:	Future Planned Start	PPAT CIP Number
Start Date:		
End Date:		PPAT SOW
Phase Cost Allocation:	СТА	
Phase Financial Source:	DE	
Lookup Cost Est Class:		
Cost Estimation Date:		Change PPAT PM
Cost Estimation Source:		
Cost Estmation Prep By:		
Useful Life > 20Yrs	No	
Comments:		



New CIP# 381000

Old CIP# 1343

#### **Phase Expenses** Contract No NA CURRENT PHASE Study and Design and Construction BUDGET Water Phase Title Energy Management: Electric Metering Improvement Program PPAT CIP Number Phase Status Future Planned Start Expense Type FY18 FY19 FY20 FY23 FY24 and Beyond FY21 FY22 Construction 255 60 60 439 2,186 Engineering Services **GLWA** Salaries Materials Other FY22 FY23 FY24 and Beyond FY18 FY19 FY20 FY21 **Current Phase Fringe** 0 0 0 0 0 0 0 **Benefit Expenses** Current Phase Non-FY23 FY24 and Beyond FY18 FY19 FY20 FY21 FY22 **Personnel Expenses** 0 0 0 0 0 0 0 FY20 FY22 FY23 FY24 and Beyond FY18 FY19 FY21 **Current Phase Total** 60 60 0 0 255 439 2,186



New CIP# 381000

## Energy Management: Electric Metering Improvement Program

Old CIP# 1343

CURRENT PHASE Stue	dy and Desigr	n and Constr	uction	В	UDGET Wa	astewater	Contract No	NA
Phase Title Energy Manag	gement: Electr	ic Metering In	nprovement Pro	ogram PPAT C	IP Number		Phase Status F	uture Planned Start
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction			60	60	255	439	2,186	
Engineering Services								
GLWA Salaries								
Materials								
Other								
	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Current Phase Fringe						0		
Benefit Expenses	0	0	0	0	0	0	C	
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel Expenses	0	0	0	0	0	0	C	)
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
current Phase Total	0	0	60	60	255	439	2,186	5
ALL PHASES TOTAL	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
ALL FRAJES IUTAL	0	0	60	60	255	439	2,186	
	0	0	60	60	255	439	2,186	

Phase Category	S/D/C	Study and Design and Construction									
Budget	Wastewater										
Phase Status	Future Planned Start	Task Name	Start Date	Duration	End Date						
Contract No	NA	Scope Development	7/1/2018	91	9/30/2018						
Cost Est Class		Procurement	9/30/2018	1182	12/25/2021						
		Project Execution	12/25/2021	2370	6/21/2028						
		Project Closeout	6/21/2028	90	9/19/2028						



Phase Category	S/D/C	Study and Design and Construction									
Budget	Water										
Phase Status	Future Planned Start	Task Name	Start Date	Duration	End Date						
Contract No	NA	Scope Development	7/1/2018	91	9/30/2018						
Cost Est Class		Procurement	9/30/2018	1182	12/25/2021						
		Project Execution	12/25/2021	2370	6/21/2028						
		Project Closeout	6/21/2028	90	9/19/2028						

## **PROJECT PRIORITIZATION SCORING**

Project Manager Score

Criteria	Score Score Comment			Criteria	Score	Score Comment			
Condition	4			Condition					
Performance (Service Level/Reli	erformance (Service Level/Reli 5			Performance (Service Level/Reliabilit					
Regulatory (Environmental/Lega	3		Regulatory (En						
0&M	2			0&M					
Public Health & Safety	1			Public Health & Safety					
Public Benefit	4			Public Benefit					
Financial	3			Financial					
Efficiency and Innovation	5			Efficiency and Innovation					
Project Manager Weighted Score				Review Committee Weighted Score					
64.6									

**Review Committee Score** 

## Describe Here the Changes from the 2018 CIP to 2019 CIP

The electric metering improvement program BCE has been fully evaluated causing the need to delay the start of the program to ensure the ability to fully implement, ensure adequate and appropriate planning and to ensure adequate time to procure the highest quality consultant/contractor to assist in implementation of this program.

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018		1,000	1,000	1,000	1,000	1,000	1,000			6,000
2019			0	0	120	120	510	878	4,372	6,000



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